

What is claimed is:

1. A processing apparatus comprising:
 - a holding member which holds and rotates said target;
 - a first nozzle which supplies a first process solution to an edge portion of one
 - 5 surface of said target in a state that said holding member is holding and rotating said target;
 - a second nozzle which supplies a second process solution to the edge portion of one surface of said target, to which surface said first nozzle supplies said first process solution; and
 - 10 a sucking hole provided in the vicinity of the edge portion of said target, which sucks a discharge solution of said first process solution and said second process solution.
2. The processing apparatus according to claim 1, wherein said second nozzle supplies said second process solution to a downstream side in the rotational direction of said target from a position to which said first nozzle supplies said first process solution.
- 15 3. The processing apparatus according to claim 1, wherein said second nozzle supplies said second process solution to an outer position from the center of said target than a position to which said first nozzle supplies said first process solution.
4. The processing apparatus according to claim 1, wherein said first nozzle and said second nozzle are provided at an angle of 0° to 90° with respect to one surface of
- 20 said target.
5. The processing apparatus according to claim 1, wherein said first nozzle and said second nozzle are provided in the vicinity of both surfaces of said target.
6. The processing apparatus according to claim 1, wherein a plurality of each of said first nozzle, said second nozzle and said sucking hole is provided around said target.
- 25 7. The processing apparatus according to claim 1, wherein said first nozzle, said second nozzle and said sucking hole are integrated, and are movable back and forth in the vicinity of the edge portion of said target at the time of processing said target.

8. A processing apparatus comprising:

a holding member which holds and rotates said target;

a supply nozzle provided at one surface side of said target, which supplies a process solution to the one surface of said target; and

5 a blocking member provided in the other surface side of said target, which blocks the process solution which flows from the one surface to the other surface of said target to provide a given processing to an edge portion of the other surface.

9. The processing apparatus according to claim 8, wherein said blocking member is provided in the vicinity of the edge portion of the other surface of said target.

10 10. The processing apparatus according to claim 8, wherein said blocking member injects fluid to the edge portion of the other surface of said target.

11. A processing apparatus comprising:

a holding member which holds and rotates said target;

a first nozzle which supplies a first process solution to a central portion of a surface
15 of said target in a state that said holding member is holding and rotating said target; and

a second nozzle which supplies a second process solution to an edge portion of the surface of said target in a state that said first nozzle supplies said first process solution to the central portion of the surface of said target.

12. The processing apparatus according to claim 11, wherein said first process
20 solution comprises pure water and said second process solution comprises a mixture of aqueous hydrogen peroxide and an acid.

13. The processing apparatus according to claim 11, wherein said second nozzle supplies the process solution to the edge portion of the surface of said target at an acute angle to the surface of said target.

25 14. The processing apparatus according to claim 11, wherein said second nozzle supplies the process solution to the edge portion of the surface of said target at an angle of 0° to 90° with respect to the rotational direction of said target on the plane that said target

forms.

15. The processing apparatus according to claim 11 further comprising:

a third nozzle having:

a plurality of pipes radially provided on the same plane and through which a process

5 solution flows; and

a plurality of holes provided at the side opposite to one surface of said target,

through which said process solution is supplied to the surface of said target.

16. The processing apparatus according to claim 15, wherein the diameter of each

of said hole is increased from one end of said pipe to the other end of said pipe.

10 17. A processing system including:

a transfer device which transfers a target; and

a processing apparatus which provides predetermined processing to said target

transferred to said processing apparatus by said transferring device;

said processing device comprising:

15 a holding member which holds and rotates said target;

a first nozzle which supplies a first process solution to an edge portion of one surface of said target in a state that said holding member is holding and rotating said target;

a second nozzle which supplies a second process solution to the edge portion of one
20 surface of said target, to which surface said first nozzle supplies said first process solution; and

a sucking hole provided in the vicinity of the edge portion of said target, which sucks a discharge solution of said first process solution and said second process solution.

18. The processing system according to claim 17, wherein said second nozzle
25 supplies said second process solution to a downstream in the rotational direction of said target from a position to which said first nozzle supplies said first process solution.

19. The processing system according to claim 17, wherein said second nozzle

supplies said second process solution to an outer position from the center of said target than a position to which said first nozzle supplies said first process solution.

20. The processing system according to claim 17, wherein said first nozzle and said second nozzle are provided at an angle of 0° to 90° with respect to one surface of
5 said target.

21. The processing system according to claim 17, wherein said first nozzle and said second nozzle are provided in the vicinity of both surfaces of said target.

22. The processing system according to claim 17, wherein a plurality of each of said first nozzle, said second nozzle and said sucking hole is provided around said target.

10 23. The processing system according to claim 17, wherein said first nozzle, said second nozzle and said sucking hole are integrated, and are movable back and forth in the vicinity of the edge portion of said target at the time of processing said target.

24. A processing system including:

a transfer device which transfers a target; and

15 a processing apparatus which provides predetermined processing to said target transferred to said processing apparatus by said transferring device;

said processing device comprising:

a holding member which holds and rotates said target;

a supply nozzle provided at one surface side of said target, which supplies a process
20 solution to the one surface of said target; and

a blocking member provided at the other surface side of said target, which blocks the process solution which flows from the one surface to the other surface of said target to provide a given processing to an edge portion of the other surface.

25 25. The processing system according to claim 24, wherein said blocking member is provided in the vicinity of the edge portion of said other surface of said target.

26. The processing system according to claim 24, wherein said blocking member injects fluid to the edge portion of said other surface of said target.

27. A processing system including:
- a transfer device which transfers a target; and
 - a processing apparatus which provides predetermined processing to the target transferred to said processing apparatus by said transferring device;
- 5 said processing device comprising:
- a holding member which holds and rotates said target;
 - a first nozzle which supplies a first process solution to a central portion of a surface of said target in a state that said holding member is holding and rotating said target; and
 - a second nozzle for supplying a second process solution to an edge portion of the
- 10 surface of said target in a state that said first nozzle supplies said first process solution to the central portion of the surface of said target.
28. The processing system according to claim 27, wherein said first process solution comprises pure water and said second process solution comprises a mixture of aqueous hydrogen peroxide and an acid.
- 15 29. The processing system according to claim 27, wherein said second nozzle supplies the process solution to the edge portion of the surface of said target at an acute angle to the surface of said target.
30. The processing system according to claim 27, wherein said second nozzle supplies the process solution to the edge portion of the surface of said target at an angle of
- 20 0° to 90° with respect to the rotational direction of said target on the plane that said target forms.
31. The processing system according to claim 27 further comprising:
- a third nozzle having:
 - a plurality of pipes radially provided on the same plane and through which a process
- 25 solution flows; and
- a plurality of holes provided at the side opposite to one surface of said target, through which said process solution is supplied to the surface of said target.

32. The processing system according to claim 31, wherein the diameter of each of said hole is increased from one end of said pipe to the other end of said pipe.

33. A processing method comprising the steps of:

supplying a first process solution to one edge portion of a target in a state that said
5 target is rotating;

supplying a second process solution to downstream from a position to which said first process solution is supplied; and

sucking atmosphere in the vicinity of the edge portion of said target to which said first and second process solutions are supplied.

10 34. A processing method using a processing apparatus comprising:

a holding member which holds and rotates said target;

a first nozzle which supplies a first process solution to a central portion of a surface of said target in a state that said holding member is holding and rotating said target; and

a second nozzle which supplies a second process solution to an edge portion of the
15 surface of said target in a state that said first nozzle supplies said first process solution to the central portion of the surface of said target,

said processing method comprising the steps of:

processing the edge portion of the surface of said target in a state that said holding member is holding and rotating said target at a first rotation velocity; and

20 processing the edge portion of said target by rotating said target at a second rotation velocity different from said first rotation velocity to shift the position where said holding member hold said target.